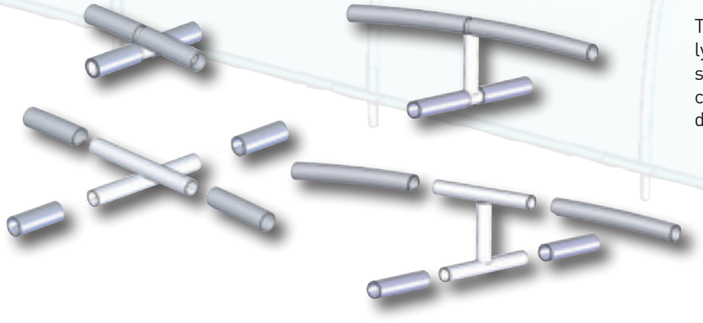
TUNNELS

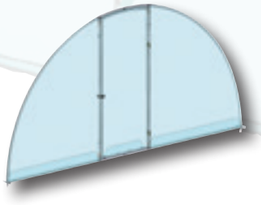
FILCLAIR
GREENHOUSE TECHNOLOGY

ARCEAUX RANGE

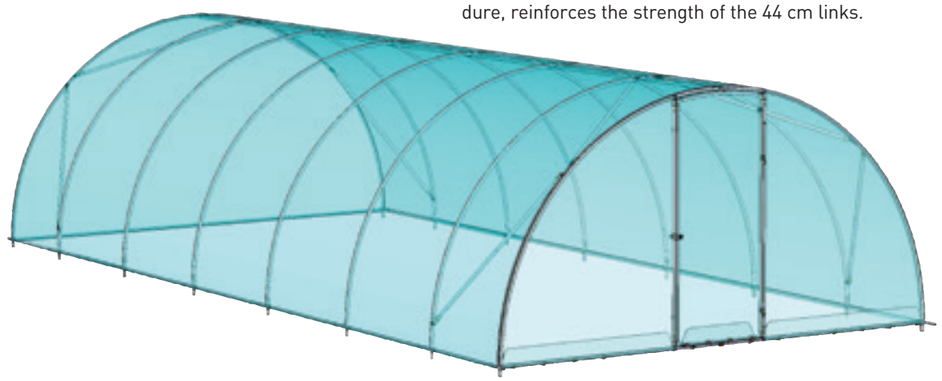
The simplest and most efficient way of protecting crops.



The arches and braces are made up of perfectly balanced round tubes, which provide optimum strength. They are made with only the best European construction steels (S250GD - Galvanization Z275, double-faced, 15/10 and 20/10 – 32 mm dia.).



The exclusive system of connecting crosses, assembled by means of a high frequency procedure, reinforces the strength of the 44 cm links.



Simple & Efficient

Their internal mounting means that they are invisible and also that they ensure the long life of the plastic films.

The ARCEAUX framework may accommodate 2 types of cover:

1. Strips of film (Buried cover)

2. Long-sheet film ("Nantes"-style cover)

DIMENSIONS

ARCEAU	450	500
Ground width	4.50	5.00
Ridge height	2.255	2.535
RH base foot height 0.55m	1.51	1.60

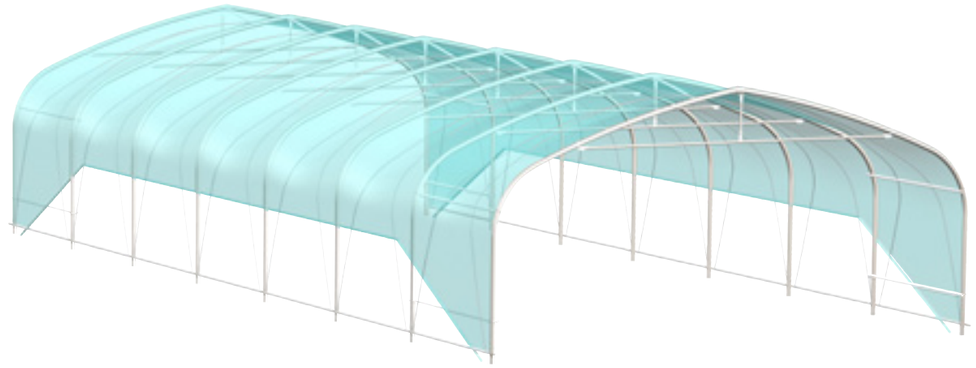
NUMERIS range

The new tunnel which rationalizes space.

- NUMERIS is a quasi-vertical side tunnel which optimizes crop surface area.

- A width of 6.40 m which complies with planting standards (1.60 and 3.20 m): every square meter covered is cultivated.

- NUMERIS may also be installed in batches and cover a maximum amount of surface area without loss of land.



Rational surface area

Straight-sided, slightly domed in shape, the arches are made of 60 mm dia. tubes, 2 arches and a "boomerang" arch plus one flat or cross-shaped locking tie.
The components are connected together by a top purlin which stabilizes length-wise and ensures film tension by double-inverted curvature.

The spacing between arches, according to lay-out areas, will be specified at: 2.00 m, 2.50 m or 3.00 m

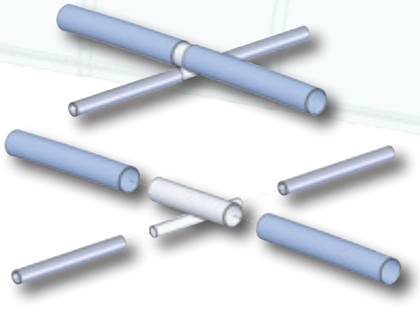
2 ground options:
1. Brace + cross with screw or Fenox anchor attachment (according to the nature of the ground). This well-known configuration is perfectly adaptable to irregular-sloped fields.
2. By means of corkscrew anchor, the pin of which directly fits into the arch. This technique requires level ground.

DIMENSIONS

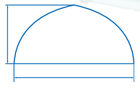
NUMERIS	640
Ground width	6.40
Ridge height	2.94
RH base foot height 0,5	2.16
Heigh under truss	2.28

TUNNEL range

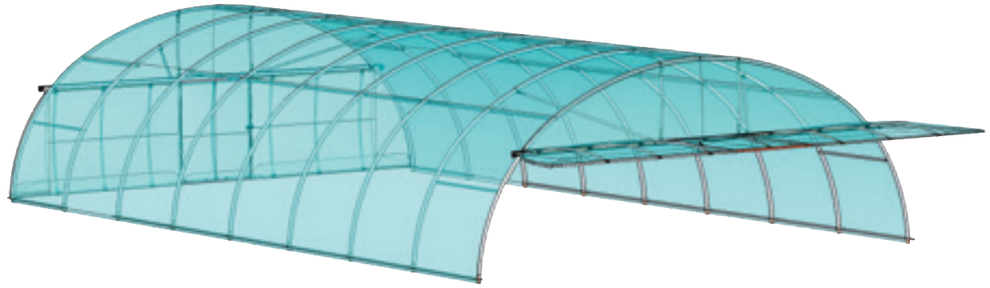
The TUNNEL range is still considered a classic of FILCLAIR innovation. An extremely reliable range which has proved its worth throughout the world.



The classics:
Available in a wide variety of heights and widths.



Nordiclair®, unequaled technical performance and climatic conditions.



Voted best tunnel in the world

Thanks to their simple design, the Filclair Tunnel greenhouses are universal. Their design is based on three elements: the arch, the brace and the cross.

They are made of perfectly balanced, round tubes which provide optimum strength and are made with only the very best European construction steels S250GD, high yield strength (Galvanization Z275: double-faced, 15/10 and 20/10 - 60 mm and 32mm dia.).

The exclusive system of connecting crosses, assembled by means of a high frequency process, reinforces the strength of the 44 cm links. There internal mounting means that they are invisible and also that they ensure the long life of the plastic films. The Tunnel framework may accommodate all types of covering film.

The simple and rapid procedure for assembling Filclair tunnels is totally unique.

DIMENSIONS

TUNNEL	600	700	800	NORDICLAIR® 800	PIED DROIT 800	850	930	930CR	PIED DROIT 960	NORDICLAIR® 1030
Ridge height	2.74	2.79	3.18	3.96	3.78	3.23	3.51	3.78	3.98	4.76
RH base foot height 0.	1.69	1.69	1.73	1.98	-	1.70	1.72	1.99	-	2.25
Heigh under truss 1 hanger	2.10	2.10	2.10	-	-	2.14	2.23	2.50	-	-
Heigh under truss 2 hangers	-	-	2.10	2.50	-	2.14	2.47/2.00	2,74/2.27	-	-
Heigh under truss cruciform	-	2.55 • 1.95	2.65 • 2.00	3.00 • 2.19	-	2.82 • 2.00	2.95 • 2.24	3.22 • 2.51	-	3.80 • 2.62
Heigh under truss triangular	-	-	2.10	2.50	2.60	-	-	-	2.60	2.91

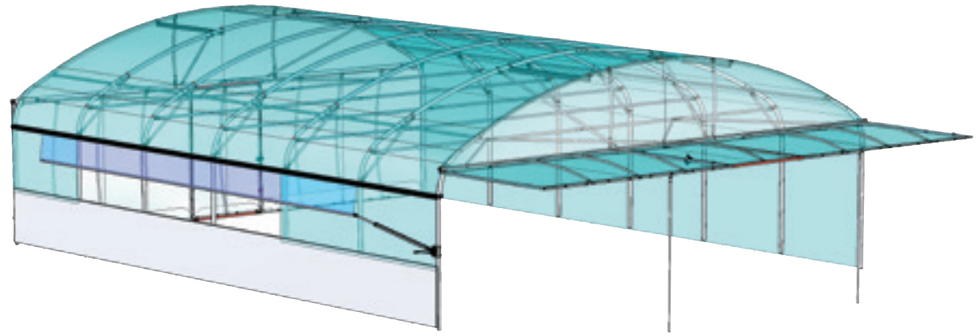
VERTICLAIR range

Verticlair® combines the tunnel's simplicity of construction with a vertical post: optimum volume, ventilation and light are thus guaranteed.

The arched poles, arches and braces are made of perfectly balanced round tubes (15/10 and 20/10 60 mm and 32 mm dia.) to provide optimum strength. They are made from only the finest galvanized steels (European standard EN-10147).

Verticlair® has basic construction components:
- Assembly with Filclair connecting crosses
- Patented telescopic legs
- Exclusive arched poles
- 75 mm x 45 mm pole (twin-tunnel)
- Aluminum clips

Verticlair®, with its exceptional performance, and its easy mounting and maintenance capabilities is now a reference in the field.



Luminous solutions

Each Verticlair® structure meets the "snow and wind" stability requirements of your planting site. Whatever the density of the structure's latticework, Verticlair® is a homogeneous and coherent assembly, designed and manufactured according to particular specifications.

Compliant with the most stringent standards (EN NF 13031-1), the CAD software performs the integral calculus on the structures in order to optimize each component.

- The continuous side ventilation is available with gravity based or winding systems.
- The CSV are installed with wind-breaker nets and an ALUCLAIR™ multi-clip Tube.
- They are controlled using a direct handle or by a universal control.

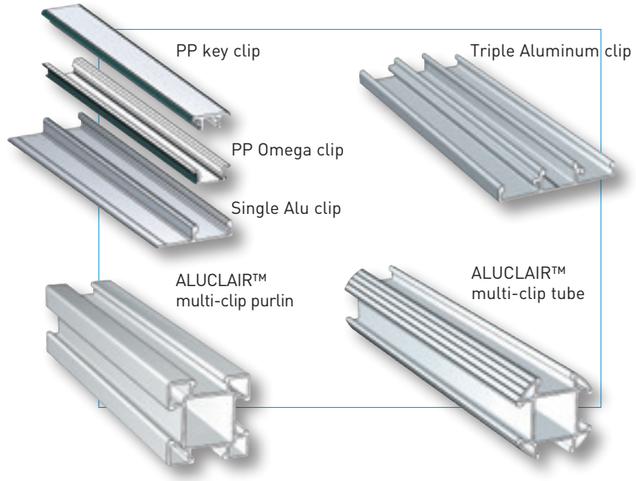
These controls may be manual as well as motorized.

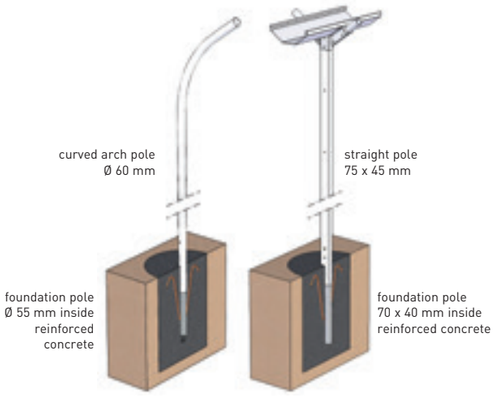
DIMENSIONS

VERTICLAIR	800	960	1600	1920
Ridge height	3.80	3.99	3.80	3.99
Heigh under truss triangular	2.60	2.60	2.60	2.60
Center-to-center distance between arches	1.50/2.00/2.50	1.50/2.00/2.50	2.00/2.50	2.00/2.50

FENOX anchor

screw anchors





Concrete foundation
(VERTICLAIR)

FX300
programmable
controller

Fan-Extractor

Airbar™ system

Mechanical strip separator

CLV universal motor

Options and equipment items

FILCLAIR climatic engineering comprises all the solutions used in order to ensure the overall success of your climate project.

Facilitating assembly and maintenance operations as well as safety related issues are integrated into the design of our products.

Inflatable double-wall or single-wall cover.

Each film attachment component is made from Aluclair™
- Aluclair™ simple clip
- Aluclair™ triple clip
- Aluclair™ roll-up tube
- Aluclair™ multi-clip purlin

The inflatable double-wall covers are equipped with AIRBAR™: an automatic pressure system. AIRBAR™ is protected by the international laws regarding industrial property.

TYPES OF GABLE AND DOOR

ARCEAUX		TUNNELS										VERTICLAIR			
4.50	5.00	6.00	7.00/78	8.00	NORDICLAIR 8.00	PIED DROIT 8.00	8.50	9.30	9.30 CR	PIED DROIT 9.60	NORDICLAIR 10.30	8.00	9.60	BI TUNNEL 16	BI TUNNEL 19.20
1.23 x 2.19	1.23 x 2.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	1.62 x 1.96	1.62 x 1.96	1.62 x 1.96	1.62 x 2.47	1.62 x 2.45	1.62 x 1.96	1.62 x 1.96	1.62 x 2.23	1.62 x 2.45	-	1.62 x 2.45	1.62 x 2.45	1.62 x 2.45 X 2	1.62 x 2.45 X 2
-	-	-	-	-	3.14 x 2.42	-	3.14 x 2.20	3.14 x 2.37	3.14 x 2.64	-	3.14 x 3.05	3.20 x 2.47	3.20 x 2.47	3.20 x 2.47 x2	3.20 x 2.47 x2

FILCLAIR
GREENHOUSE TECHNOLOGY

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